

ASSOCIATION OF SEVERAL FEMALE SAWFLIES IN THE
GENUS *PACHYNEMATUS* WITH PREVIOUSLY
DESCRIBED MALES

(Hymenoptera: Tenthredinidae)

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Ross (1945) described the males of *Pachynematus miscus* from Oregon and California and *P. sporax* from Idaho, Oregon, Saskatchewan and Washington but was unable to associate females with the males. Consequently, females of the above species have never been described.

Considering the fact that several authors record members of this genus causing considerable damage to wheat, Marlatt (1896), Ross (1945) and Armitage (1954), it is felt advisable to describe the adult females. Recent collections of males with females in California now permit this association to be made.

Specimens described are in the collection of the author and the California Insect Survey.

PACHYNEMATUS MISCUS Ross

Pachynematus miscus Ross, Proc. Ent. Soc. Wash., 47:114; 1945. ♂.

Female.—Length 7.5 mm. Color black with tibiae and apices of femora dirty-white; wing membrane hyaline, veins and stigma dark brownish-black. General structure typical for genus. Saw as in figures A, and B.

Allotype, female.—Berkeley, Alameda County, California, March 31, 1954. J. W. MacSwain collector. In collection of the author.

Distribution in California—Alameda County, Berkeley, ♀, III-31-54 (J. W. MacSwain, W.W.M.); 4 ♂ ♂ III-22-54 to IV-7-54 (J. W. MacSwain, W.W.M.) Previously recorded from Corvallis, Oregon and San Francisco (Ross, 1945)

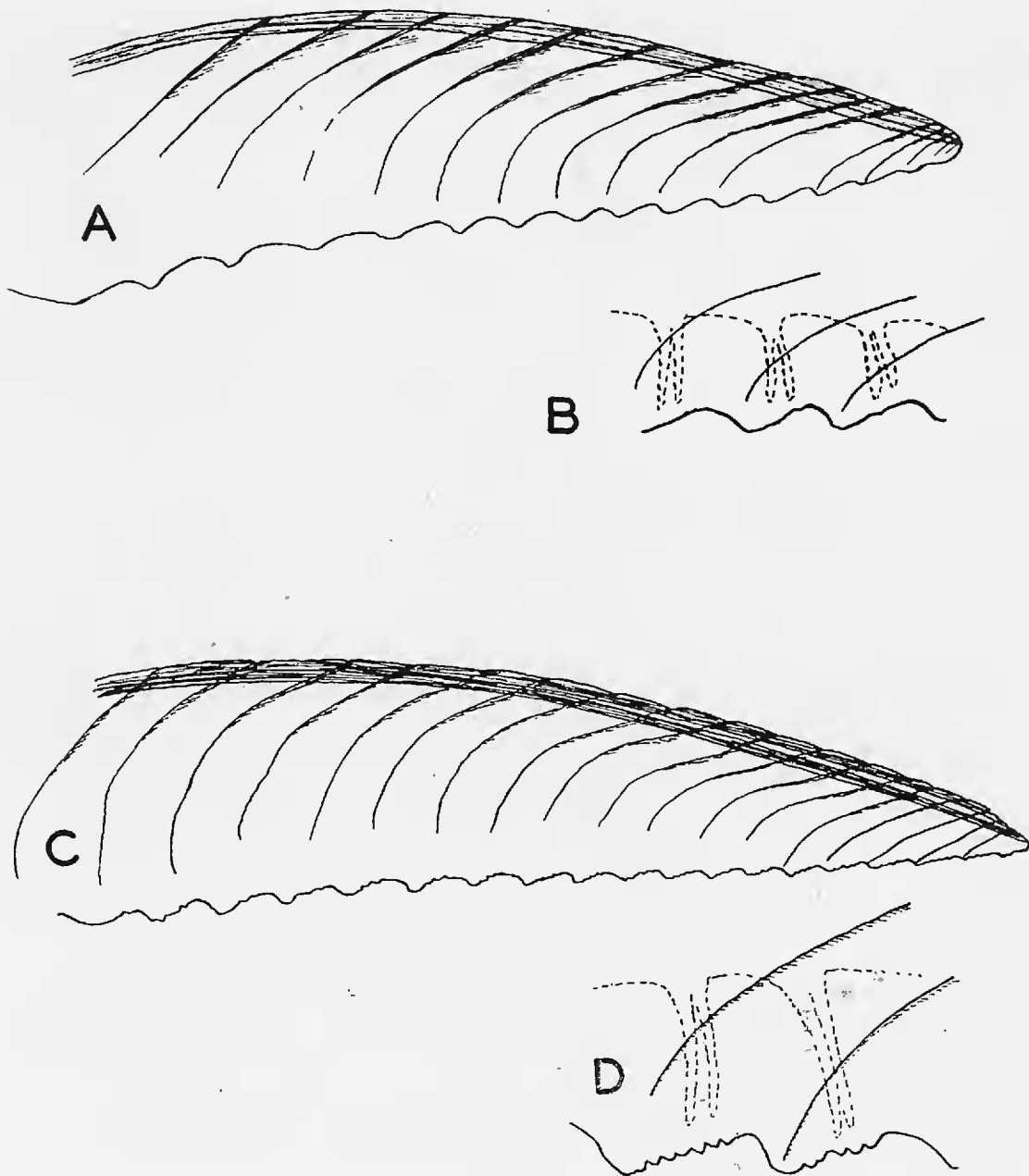
Larvae of this species remain unknown but presumably feed upon grasses as to other known members of the *extensicornis* complex. Adults were taken upon flowers of buttercup, *Ranunculus californicus* Benth.

PACHYNEMATUS SPORAX Ross

Pachynematus sporax Ross, Proc. Ent. Soc. Wash., 47(5): 114-115, ♂.

Female.—Length 6.5-7 mm. Color in general yellowish-brown and black. *Head*: yellowish-brown shading to reddish-orange dorsally. A large somewhat quadrate spot on front of head enclosing ocelli, protruding laterally towards the eyes in the antennal region and extending backwards as narrow thread-like lines in post-ocellar lateral furrows, a small area between the furrows, and antennae, black; mandibles reddish orange on apical half shading to black at apex. *Thorax*: praescutum with a large, solid U-shaped

mark, a large spot on lateral portion of scutum, a spot on midline of mesoscutellum which narrows anteriorly, post-tergite, metascutellum, cervical sclerites, basal half as well as a line on apex of mesepisternum, black. *Legs*: Base of coxae and base of femora beneath, tibiae at apex frequently and tarsi, black. *Wings*: membrane hyaline, costa, radial stem, base of medius and stigma straw-color, remainder of venation brownish-black. *Abdomen*: tergites I-VIII except narrow posterior line and saw sheath, black. Remainder of body yellowish-brown or straw-color. Saw as in figures C, and D.



EXPLANATION OF FIGURES

A, Lancet of saw of female *Pachynematus miscus* Ross; B, ventral margin enlarged; C, Lancet of saw of female *P. sporax* Ross; D, ventral margin enlarged.

Allotype, female.—California, Santa Barbara Co., *Cuyama Valley*, March 3, 1954. R. M. Hawthorne collector. On wheat. In collection of the author.

Distribution in California—Santa Barbara Co., *Cuyama Valley*, 2 ♀ ♀, III-3-54 (R. M. Hawthorne, W.W.M.); 2 ♂ ♂, III-11-54 (R. M. Hawthorne, W.W.M.); 61 ♀ ♀, IV-8-54 (H. L. Hall, W.W.M.); 14 ♀ ♀, V-15-54 (R. P. Allen, W.W.M.). All collections made on wheat. Previously recorded from Saskatchewan, Idaho, Oregon and Washington (Ross, 1945).

Larvae of this species have been causing economic damage to wheat in the Cuyama Valley since 1950 according to Mr. J. E. Swift, Extension Entomologist, University of California, who first brought them to my attention in the spring of 1953. A number of adults were secured this year as indicated in the above records. The color pattern is remarkably uniform.

REFERENCES CITED

ARMITAGE, H. M.

1954. Current insect notes. Bull. Calif. State Dept. Agric. 43(2):73-76.

ROSS, H. H.

1945. A taxonomic outline of the Nearctic species of *Pachynematus*. Proc. Ent. Soc. Wash. 47(5):105-120.

MARLATT, C. L.

1896. Revision of the Nematinae of North America. U.S. Dept. Agric. Div. of Ent. Tech. Ser. 3, p. 97.

BOOK NOTICES

A REVISION OF THE PSYCHODIDAE (DIPTERA) IN AMERICA NORTH OF MEXICO. By Larry W. Quate. Univ. Calif. Publ. in Ent., Vol. 10, No. 3, pp. 103-273, 105 text figs. University of California Press, Berkeley and Los Angeles; May 25, 1955. Price \$2.50.

The methods devised to make adequate slide mounts of these tiny flies are given on pp. 106-107. There are identification keys, from subfamily to subspecies level. One genus, 27 species, and 5 subspecies are described as new.

A SYSTEMATIC STUDY OF THE GENUS APHYTIS HOWARD (HYMENOPTERA, APHELINIDAE) WITH DESCRIPTIONS OF NEW SPECIES. By Harold Compere. Univ. Calif. Publ. in Ent., Vol. 10, No. 4, pp. 271-320, 19 text figs. University of California Press, Berkeley and Los Angeles; May 10, 1955. Price 75 cents.

These tiny parasites of scale insects are exceedingly difficult to classify. In this paper the separations are chiefly on morphology, but on the basis of over 30 years of field and laboratory experience the author draws attention to many challenging problems. There are keys to 7 related genera, to 15 species, and to certain forms in each of 3 groups of species; 13 new species are described.—HUGH B. LEECH, *Department of Entomology, California Academy of Sciences, San Francisco*.